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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,728	12/04/2003	Ulrich Nagorny	C 2572 COGG	2298

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COGNIS CORPORATION  
PATENT DEPARTMENT  
300 BROOKSIDE AVENUE  
AMBLER, PA 19002

EXAMINER
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GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/727,728

Applicant(s)

NAGORNY ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

The rejection of claim 6 under 35 U.S.C. 112, second paragraph is moot in view of applicants' amendment.

Claims 1 and 3-6 are currently under prosecution.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Merkel 6,331,585 B1, for reasons of record.

Merkel teaches a coating composition comprising a water-dispersible epoxy resin which is solid at 20 degrees C, wherein said epoxy resin does not comprise a reaction product of epichlorohydrin and either bisphenol A or bisphenol F, wherein the composition further comprises a water-dilutable epoxy resin hardener in the requisite amounts, per claim 1. In addition, Merkel teaches a method of coating wherein this composition can be applied to a surface, such as fiber glass, per claims 3 and 4. See abstract and column 1, lines 20-64 and claim 11. As to the water-dilutable epoxy resin curing agent, Merkel is silent as to the method of making his hardener. Nonetheless, he

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teaches the usage of "WATERPOXY 751" which is the same curing agent that applicants disclose in their examples as being suitable. Accordingly, though not specifically stated, the examiner has reason to believe that the hardener disclosed by Merkel is formed in accordance with at least one of the claimed critical method steps for making said hardener. Therefore, it is the examiner's position that Merkel describes the claimed method and coated glass fiber within the meaning of 35 U.S.C. 102, and it is of no moment that Merkel does not exemplify such method and glass fiber per se. *In re Sivaramakrishnan*, 673 F.2d 1383, 1384-85, 213 USPQ 441, 442 (CCPA 1982). The teachings of Merkel provide a description of the claimed method and coated glass fiber just as surely as if the reference exemplified such method and glass fiber.

Therefore, the teachings of Merkel anticipate the invention as claimed in present claims 1 and 3-4.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merkel 6,331,585 B1, as applied above to claims 1 and 3-4, in view of Sulzbach et al, 6,395,806 B1 or 6,387,988 B1 or 6,387,989 B1 (Sulzbach).

Merkel is as set forth previously but does not specifically teach the process steps for forming his hardener or the components therein. Sulzbach '806, '988, and '989

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teaches hardeners for epoxy resins that act as a dispersant for epoxy resins in aqueous based compositions. Sulzbach '806 teaches a hardener that is obtained by the reaction components and intermediate processing steps that result in B1, (see abstract and column 2, lines 27-64), '988 teaches a hardener that is obtained by the reaction components and intermediate processing steps that result in B2 (see abstract and column 2, lines 28-58), and '989 teaches a hardener that is obtained by the reaction components and intermediate processing steps that result in B3 (see abstract and column 2, lines 28-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Merkel by using as the hardener a self-dispersible hardener taught by Sulzbach '806 or '988 or '989, to aid in the dispersing of the epoxy resin in aqueous based compositions.

Therefore, the combined teachings of Merkel and Sulzbach '806 or '988 or '989 would have rendered obvious the invention as claimed in present claims 1, 3-4 and 6.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for one or more polyhydroxy compounds wherein the equivalent ratio of ester groups in the intermediate compound Z4 to hydroxyl groups in the polyhydroxy compound (g) is adjusted to the requisite value, does not reasonably provide enablement for an equivalent ratio of the intermediate compound Z4 to hydroxyl

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groups in the polyhydroxy compound (g) being adjusted to the requisite value. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. More specifically, claim 1 as amended sets forth the "equivalent ratio of Z4". There is no support in the specification for an equivalent ratio of Z4 per se.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the language of "1 to 98 wt% of a water-dispersible epoxy resins" is indefinite because it is not clear whether this claim refers to a single epoxy resin or multiple resins.

Claim 5 is indefinite for reasons previously stated. In particular, claim 5 is drawn to "a method of reinforcing synthetic fiber" and the claimed method step of "combining" is vague. The fact that a plethora of possible process steps can be embraced by the term "combining" demonstrates that the metes and bounds for which patent protection is being sought is not clear.

No claims are allowed.

### ***Response to Arguments***

9. Applicant's arguments filed August 24, 2005 have been fully considered but they are not persuasive.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of the cited references are cumulative to the teachings of Sulzbach et al and all teach the claimed hardeners obtained by the claimed reactions.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

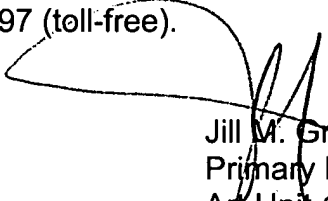
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray  
Primary Examiner  
Art Unit 1774

jmg